



**NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF SAFE DRINKING WATER
TECHNICAL REVIEW FORM**

**FLUORIDATION
(N.J.A.C. 7:10-11.15(f))**

 Water Purveyor

 PWSID#

 Municipality

Compound used for fluoridation:

- ☐ Sodium fluoride
☐ Sodium fluorosilicate
☐ Fluorosilicic acid

Type of chemical feeding equipment:

- ☐ Dry - gravimetric
☐ Dry - volumetric
☐ Solution

NOTE: The feeding of sodium silicofluoride slurries (batch mixes) will not be approved.

	YES	NO	N/A									
1. Are the fluoridation units designed to maintain a finished water fluoride level between 0.8 and 1.2 mg/l at all points in the distribution system?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
2. Are fluoridation chemicals stored in their original unopened containers or in corrosion resistant covered storage containers?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
3. Has the Technical Review Form for Chemical handling and Feeding been prepared for the fluoridation feed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
4. Are gravimetric feeders mounted on appropriately designed weighing scales?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
5. Are the following minimum dilution ratios and detention times provided?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
<table border="0"> <thead> <tr> <th align="left"><u>Compound</u></th> <th align="left"><u>Dilution Ratio</u></th> <th align="left"><u>Detention Time</u></th> </tr> </thead> <tbody> <tr> <td>Sodium fluoride</td> <td>12 gallons of water per pound of sodium fluoride</td> <td>5 minutes</td> </tr> <tr> <td>Sodium fluorosilicate</td> <td>60 gallons of water per pound of sodium fluorosilicate</td> <td>15 minutes</td> </tr> </tbody> </table>	<u>Compound</u>	<u>Dilution Ratio</u>	<u>Detention Time</u>	Sodium fluoride	12 gallons of water per pound of sodium fluoride	5 minutes	Sodium fluorosilicate	60 gallons of water per pound of sodium fluorosilicate	15 minutes			
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6. Is an antisiphon device provided to prevent siphonage of the solution?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									
7. Are floor surfaces adjacent to the feeders smooth and impervious and sloped towards adequate drains to permit hosing?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>									

	YES	NO	N/A
8. Will waste liquids or sludge from fluoride solution tanks be disposed of in accordance with applicable State and Federal law and regulations?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Where chemicals are being manually emptied into the treatment unit, is an exhaust fan with a minimum velocity of 200 feet per minute provided for dust control?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Is vapor vented to the outside when fluorosilicic acid is handled and is the acid pumped through a closed system with an air inlet from the outside?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Are rubber or neoprene gloves, hand washing facilities, and, where dry fluoride chemicals are handled, U.S. Bureau of Mines approved dust respirators provided?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Are fluoride storage and feed equipment located in rooms separate from other treatment units and are said rooms secured against the entry of unauthorized persons?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Is a fluoride residual kit for routine sampling of fluoride content provided?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

***Submit appropriate engineering plans, specifications, reports, etc. to substantiate your answers. ***

I hereby certify that answers provided herein are accurate and reflective of the project being considered for approval.

Signature of Engineer
Professional Engineer's Embossed Seal

Date

N.J.P.E. #

Type or Print Name of Engineering Firm